a first expanding element, which drives the pressure generating element so as to expand the pressure chamber, so that a meniscus of liquid in the nozzle orifice is pulled toward the pressure chamber, the first expanding element being supplied for a time period which is not greater than a half a natural vibration period of the pressure chamber;

a first contracting element, which drives the pressure generating element so as to contract the pressure chamber expanded by the first expanding element, so that a center portion of the meniscus is swelled in an ejecting direction of a liquid drop, a potential difference of the first contracting element being not greater than 60% of a potential difference between a minimum potential and a maximum potential of the drive signal; and

B1 end

a second expanding element, which drives the pressure generating element so as to expand the pressure chamber contracted by the first contracting element, so that a marginal portion of the swelled center portion of the meniscus is pulled toward the pressure chamber,

wherein the drive pulse includes a contracted state holding element, which connects the first contracting element and the second expanding element such that a termination end of the first contracting element and a start end of the second expanding element have an identical potential; and

wherein the contracted state holding element is supplied for a time period which is not greater than one quarter the natural vibration period of the pressure chamber.

17. (Amended) A method of driving a liquid jetting apparatus provided with a liquid jetting head which includes a nozzle orifice, a pressure chamber communicated with the nozzle orifice, and a pressure generating element, the method comprising the steps of:

a first expanding step, for driving the pressure generating element so as to expand the pressure chamber, so that a meniscus of liquid in the nozzle orifice is polled toward the pressure chamber as much as possible;

a first contracting step, for driving the pressure generating element so as to contract the pressure chamber expanded by the first expanding step, so that a center portion of the meniscus is swelled in an ejecting direction of a liquid drop;

B2 cont'd

a second expanding step, for driving the pressure generating element so as to expand the pressure chamber contracted by the first contracting step, so that a marginal portion of the swelled center portion of the meniscus is pulled toward the pressure chamber; and

a second contracting step, for driving the pressure generating element so as to contract the pressure chamber expanded by the second expanding step, so that the meniscus is again urged in the ejecting direction to increase jetting speed of a satellite liquid drop which follows a main liquid drop,

wherein a contracted amount of the pressure chamber in the second contracting step is larger than at least one of a contracted amount of the pressure chamber in the first contracting step and an expanded amount of the pressure chamber in the second expanding step; and

B2 end

wherein the contracted amount of the pressure chamber in the second contracting step is not larger than an expanded amount of the pressure chamber in the first expanding step.

Please add the following new claims:

22. (New) A liquid jetting apparatus, comprising:

a liquid jetting head, including a nozzle orifice, a pressure chamber communicated with the nozzle orifice, and a pressure generating element which varies, the volume of the pressure chamber; and

a drive signal generator, which generates a drive signal including a drive pulse, supplied to the pressure generating element, the drive pulse including:

B3 contd

a first expanding element, which drives the pressure generating element so as to expand the pressure chamber, so that a meniscus of liquid in the nozzle orifice is pulled toward the pressure chamber as much as possible;

a first contracting element, which drives the pressure generating element so as to contract the pressure chamber expanded by the first expanding element, so that a center portion of the meniscus is swelled in an ejecting direction of a liquid drop;

a second expanding element, which drives the pressure generating element so as to expand the pressure chamber contracted by the first contracting element, so that a marginal portion of the swelled center portion of the meniscus is pulled toward the pressure chamber; and

a second contracting element, which drives the pressure generating element so as to contract the pressure chamber expanded by the second expanding element, so that the meniscus is again urged in the ejecting direction to increase jetting speed of a satellite liquid drop which follows a main liquid drops,

wherein a contracted amount of the pressure chamber established by the second contracting element is larger than at least one of a contracted amount....of the pressure chamber established by the first contracting element and an expanded amount of the pressure chamber established by the second expanding element; and

B3 Cont'd

wherein the contracted amount of the pressure chamber established by the second contracting element is not larger than an expanded amount of the pressure chamber established by the first expanding element.

23. (New) The liquid jetting apparatus as set forth in claim 22, wherein the first expanding element is supplied for a time period which is not greater than a half a natural vibration period of the pressure chamber.

24. (New) The liquid jetting apparatus as set forth in claim 22, wherein the second contracting element is supplied for a time period which is not greater than one third of a natural vibration period of the pressure chamber.

25. (New) The liquid jetting apparatus as set forth in claim 22, wherein a time period between an initial end of the first contracting element and an initial end of the second contracting element is not greater than a natural vibration period of the pressure chamber.

B3 end

26. (New) The liquid jetting apparatus as set forth in claim 25, wherein the time period between the initial ends of the first contracting element and the second contracting element falls within a range of one quarter to one third the natural vibration period of the pressure chamber.